

and whitish about to middle, the acuminate or acute callous-pointed herbaceous tip loosely erectish, pubescent on both faces, the inmost series shorter and without herbaceous tip; disk 6–7 mm. high, about 4 mm. thick; rays about 6, yellow, pistillate, the tube 2 mm. long, essentially glabrous, the lamina oval, 3-denticulate, up to 9 mm. long, 5.5 mm. wide, about 13-nerved, hispidulous and gland-dotted dorsally; disk flowers about 12, their corollas yellow, essentially glabrous except on the hispidulous teeth, 5 mm. long (tube 2 mm., throat slender-funnelform, 2.5 mm., teeth broadly ovate, 0.5 mm.); pales scarious, sometimes purplish, acute or obtusish, sometimes shortly 3-lobed, hispidulous-ciliolate on margin and keel above; ray achenes obcompressed, plumpish, obovate, subulate-margined, 1-ribbed on inner face, mottled, glabrous except at the slightly hispidulous apex, truncate or emarginate at apex, 2-calloused at base, 4–4.2 mm. long, 2.3–2.5 mm. wide, their pappus a ciliolate cup 0.4 mm. high, borne on a usually slender stipe 0.5–0.8 mm. long, the whole 1–1.2 mm. long, readily detergible at maturity; mature disk achenes not seen, their pappus (young stage) a lacerate cup 0.7 mm. high, connate with 2 awns 1–1.3 mm. long.

GUATEMALA: In logwood swamp, Dos Arroyos, Dept. Petén, 15 March 1931, *Bartlett* 12111 (type no. 1,540,626, U. S. Nat. Herb.).

Nearest *Wedelia parviceps* Blake, and essentially indistinguishable as to heads and involucre, except for their slightly larger size. In that species, however, the leaves are ovate to lanceolate, not half as wide as long, the achene is only about two-thirds as long, and its subsessile or short-stipitate pappus-cup, including its stipe, is only half as long.

Melanthera parviceps Blake, sp. nov.

Herba opposite ramosa; caulis quadrangularis breviter strigosus; folia oblongo-triangularia vel lanceolata acuminata basi cuneata crenato-serrata tenuia utrinque viridia hispidula et hispido-hirsuta, minoribus saepius leviter hastatis; capitula parva anthesi 3–6 mm. diam. apice caulis ramorumque irregulariter cymosa-paniculata, pedunculis saepe 2–4-cephalis; involucri ca. 3 mm. alti phyllaria ovata acutiuscula strigosa et ciliata apice breviter herbacea; paleae receptaculi brevissime acutatae.

“Fragile herb, 2 m. high, spearmint-scented;” stem bluntly 4-angled, up to 4 mm. thick, purplish, rather sparsely short-strigose; principal internodes 1–1.5 dm. long; leaves opposite; petioles slender, hispid-hirsute, 1–4 cm. long, the larger narrowly cuneate-winged at apex for about 1 cm. (passing into the blade); blades of larger leaves triangular-oblong, about 14 cm. long, 4–4.5 cm. wide, short-cuneate at base, crenate-serrate nearly throughout with about 35 pairs of subequal rounded apiculate teeth about 1 mm. high and about 3 mm. apart, triplinerved, lightly prominulous-reticulate beneath, above dark green, evenly but not densely hispidulous and hispid-hirsute, beneath scarcely lighter green, hispidulous on surface, hispid-hirsute on veins and veinlets; smaller leaves usually slightly hastate at base, more sharply toothed, 7 cm. long and 3 cm. wide, or smaller; heads usually in 2’s–4’s at apex of stem and branches, in fruit 5 mm. high, 6–8 mm. thick, the peduncles strigose, 1–4-headed, mostly 1–5 cm. long, the pedicels usually 0.5–2.5 cm. long; involucre 2-seriate, subequal, 3–3.5 mm. high, appressed, the phyllaries ovate, acutish, callous-tipped, strigose, ciliate above; disk in flower about 4 mm. high, 6 mm. thick; flowers about 24, their corollas white, hispidulous on teeth, 3.2 mm. long (tube 0.7 mm., throat campanulate, 1.5 mm., teeth triangular-ovate, 1 mm. long); pales hispidulous and sometimes purplish above, shortly and rather bluntly pointed, 4.2 mm. long (the narrowed tip 0.8

mm. long); achenes plump, lenticular, hispidulous on apex, 2.2 mm. long; pappus caducous, of 3-4 (or more?) subequal slender hispidulous awns 1.5 mm. long or less.

BRITISH HONDURAS: In ravine, Little Mountain Pine Ridge, El Cayo District, 1 March 1931, *Bartlett* 11882 (type no. 1,540,623, U. S. Nat. Herb.).

Related to *Melanthera purpurascens* Blake, of Chiapas, but a much larger, coarser, erect plant, with even smaller heads, usually grouped at tips of branches, and less pointed pales.

Calea fluviatilis Blake, sp. nov.

Fruticulus pedalis; caules tenues ramulosi foliosi minute hispiduli glabrescentes; folia angustissime lineari-lanceolata ca. 2.5 cm. longa 1.5 mm. lata coriacea remote callososerrulata subglabra glanduloso-adsperosa; capitula discoidea parva 13-flora 3-7 terminalia cymosa, in pedunculis ca. 1 cm. longis; involucri 4-5 mm. alti phyllaria exteriora pauca triangularia supra medium vel maxima ex parte herbacea glanduloso-adsperosa interioribus ovalibus vel ovatis subscariosis apice saepe purpurascens subglabris aequalia vel breviora; pappi paleae 20 acheniis hispidulis subduplo longiores.

Undershrub 25 cm. high, several-stemmed from a thick woody flattened caudex 2.5 cm. wide; stems erectish, somewhat trichotomously branched, in age with numerous small branchlets, subterete or subangulate, minutely hispidulous on the younger parts with erectish hairs, glabrescent; leaves opposite; petioles 1 mm. long; blades 1.3-2.8 cm. long, 1-2 mm. wide, acuminate to each end, obtusely callous-tipped, remotely 2-3-denticulate or serrulate on each side with low callous teeth, triplinerved, somewhat revolute-margined, deep green, dotted on both sides with sessile shining yellowish glands, otherwise glabrous or sparsely and obscurely strigillose beneath; heads about 7 mm. high, 4 mm. thick, in terminal clusters of 3-7, the peduncles very slender, 8-12 mm. long, hispidulous and glandular-dotted; involucre 3-4-seriate, more or less distinctly graduate, the outermost phyllaries triangular, obtusely callous-tipped, 3-5 mm. long, 0.7-1 mm. wide, appressed, coriaceous-herbaceous above middle or nearly throughout, 1-ribbed and with an obscure pair of nerves, dotted with sessile glands, the others yellowish-brown, usually purplish-tipped, rounded, several-vittate; corollas yellow, glabrous, somewhat zygomorphic, 4.8 mm. long (tube 2.2 mm., throat 1-1.2 mm., teeth unequal, 1.2-1.8 mm. long, 2 or 3 being less deeply cleft than the others); pales oblong, 5 mm. long, obtuse, sometimes abruptly and obtusely short-pointed, glabrous, yellowish, about 3-vittate; achenes blackish, erectish-hirsutulous except toward base, 2 mm. long; pappus paleae about 20, narrowly linear-lanceolate, acuminate, subequal, hispidulous-ciliolate, 3.5 mm. long.

BRITISH HONDURAS: On stones in Río Privación, Mountain Pine Ridge, El Cayo District, 26 Feb. 1931, *Bartlett* 11790 (type no. 1,540,622, U. S. Nat. Herb.).

A member of the subgenus *Eucalea*, very distinct from any other North American species in foliar characters.

Liabum dimidium Blake, sp. nov.

Frutex scandens; caulis sordide arachnoideo-tomentosus glabrescens et praecipue supra pilosus vel pilosulus pilis sordidis patentibus multiloculatis; folia late ovata petiolata serrulato-denticulata triplinervia supra tenuiter arachnoidea glabrata subtus albido-tomentosa; capitula 7-11-flora discoidea numerosissima, paniculam latam efformantia; involucri ca. 4-seriati 5-6 mm.

alti pappo subduplo brevioris phyllaria ovata ad oblongo-linearia obtusa vel rotundata ciliata; achenia dense hispidula; pappus albidus 6.5 mm. longus duplex, exteriore setuloso ca. 1.5 mm. longo.

"Lax scrambling shrub, 6 m. high;" stem (above) subterete, striatulate, 6 mm. thick, rather thinly arachnoid-tomentose, glabrescent, sordid-pilose or -pilosulous especially in inflorescence; leaves opposite; petioles slender, 1.3-3 cm. long, thinly arachnoid, glabrescent; blades of larger leaves 9-12 cm. long, 6-9.5 cm. wide, relatively thin, acute, at base broadly cuneate or rounded-cuneate, serrulate-denticulate above the mainly entire base with very slender teeth about 0.6 mm. long and 3-6 mm. apart, beneath compactly but not thickly dull-whitish-tomentose; panicles terminating stem and upper branches, together forming a loose pyramidal panicle about 28 cm. wide and 20-30 cm. long, thinly arachnoid and rather densely sordid-pilosulous with many-celled spreading hairs, the heads partly sessile, partly on pedicels up to 4 mm. long; involucre 4-5-seriate, strongly graduate, the 2-3 outer series of phyllaries ovate, somewhat fleshy, striate when dry, dull green, obtuse, ciliate and sparsely sordid-pilosulous, the 2 inner series linear-oblong, about 1 mm. wide, thinner, not striate, sordid-ciliate, erect; receptacle shallowly alveolate, the edges of the alveolae minutely hispidulous; corollas yellow, pilosulous on upper part of tube, 8 mm. long (tube slender-funneliform, 3.3 mm. long, throat thick-cylindric, 2 mm. long, teeth linear-triangular, 2.7 mm. long, hispidulous at apex); achenes (not truly mature ?) 1.3 mm. long; pappus yellowish-white, double, the outer setulose, about 1.5 mm. long, scarcely wider than the inner, the inner of hispidulous bristles bent at apex, 7 mm. long.

GUATEMALA: Tikal, Dept. Petén, 12-15 April 1931, *Bartlett* 12602 (type no. 1,540,627, U. S. Nat. Herb.)

A member of the group separated by Rydberg under the generic name *Sinclairia* Hook. & Arn., and related to *Liabum polyanthum* Klatt and ***Liabum brachypus*** (Rydb.) Blake.³ The former has a longer involucre (about 7-9 mm. high), nearly or quite equaling the pappus, and the inner phyllaries are strongly spreading or reflexed above at maturity. *Sinclairia pittieri* Rydb., the type of which I have studied, is not separable by any real character from *L. polyanthum*. *Liabum brachypus* lacks the sordid spreading hairs of the new species, and has a somewhat longer involucre (about 7 mm.) and a dense inflorescence. The specific name of the new species refers to the relative length of the involucre and the fruiting head.

³ *Sinclairia brachypus* Rydb. N. Amer. Fl. 34: 299. 1927.

ZOOLOGY.—*Two new pocket mice from Arizona*.¹ E. A. GOLDMAN, Biological Survey.

When *Perognathus amplus* was described by Osgood in his revision of the genus (North Amer. Fauna, No. 18, p. 32, Sept. 20, 1900) the type was unique. Some subsequent efforts to obtain topotypes have been unsuccessful, owing perhaps to seasonal or cyclic variations in numbers. Over thirty specimens from various localities in the general region are, however, regarded as fairly representative. A series from

¹ Received June 16, 1932.